

REMARKS

This responds to the Office Action mailed on June 8, 2005, and the references cited therewith.

Previously withdrawn claims 2-13, 16-26 and 28 are cancelled herein to expedite allowance of subject matter elected in response to the Restriction Requirement. As a result, claims 1, 14, 15 and 27 are now pending in this application. The “comprising” term in claims 1, 14 and 27 has been changed to “consisting of.” Applicant submits that such changes do not constitute new matter.

Examiner Interview Summary

Applicant’s attorney thanks Examiner Audet for courtesies extended in their telephone interview on May 27, 2005, wherein it was agreed to cancel the withdrawn claims 2-13, 16-26 and 28. Applicant’s attorney understood that the Examiner would consider whether the “comprising” language in the claims was acceptable while Applicant’s attorney would consider whether to amend claim 1 as suggested by the Examiner in view of the 101 rejection.

This account is believed to be a complete and accurate summary of the interview as required by 37 C.F.R. § 1.133. If the Examiner believes that this summary is inaccurate or incomplete, Applicants respectfully request that the Examiner point out any deficiencies in his next communication so that Applicants can amend or supplement the interview summary.

Double Patenting Rejection

Claims 1, 14-15 and 27 were provisionally rejected under the judicially created doctrine of double patenting over claims 1-73 (i.e. claims 1 and 63) of co-pending Application No. 10/219,561 (Quirk et al., 2003/0166567 A1) and claims 1-40 (i.e. claims 18 and 23) or co-pending Application No. 10/219,329 (Quirk et al., 2003/0096757 A1).

Applicant submits that the claims of the present application are patentably distinct from those in the related cases because the present claims are directed to peptide SEQ ID NO:8-10 whereas the claims in co-pending Application No. 10/219,561 (Quirk et al., 2003/0166567 A1) and co-pending Application No. 10/219,329 (Quirk et al., 2003/0096757 A1) are directed to peptides that have different sequences.

However, Applicant will consider whether filing a Terminal Disclaimer is appropriate when all claims are indicated to be otherwise allowable and if some overlap arises between the subject matter of the present application and the allowed claims of those other applications.

§101 Rejection of the Claims

Claim 1 was rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter (a product of nature). Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is directed to statutory subject matter and requests withdrawal of this rejection under section 101.

§102 Rejection of the Claims

Claim 1, as drawn to SEQ ID NO: 8, was rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Seiki et al. (US 6,184,022 B1). As stated by the Examiner, Seike et al. discloses two polypeptides, one with 708 residues and the other with 468 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Seiki et al. anticipate claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is not anticipated by Seiki et al. and requests withdrawal of this rejection under section 102(b). Claim 1, as drawn to SEQ ID NO: 8 or 9, was rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Venter et al. (US 6,812,339 B1).

Claim 1, as drawn to SEQ ID NO: 8 or 9, was rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Venter et al. (US 6,812,339 B1). As stated by the Examiner, Venter et al. disclose two polypeptides, one with 713 residues and the other with 491 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Venter et al. anticipate claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant

submits that the subject matter of claim 1 is not anticipated by Venter et al. and requests withdrawal of this rejection under section 102(e).

Claims 1, 14-15, and 27, as drawn to SEQ ID NO: 10, was rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Hu (Statutory Invention Registration US H1973 H). As stated by the Examiner, Hu discloses two polypeptides, one with 444 residues and the other with 491 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Hu anticipates claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is not anticipated by Hu and requests withdrawal of this rejection under section 102(b).

Claim 1, as drawn to SEQ ID NO: 8, was rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Falduto et al. (US 6,399,371 B1). As stated by the Examiner, Falduto et al. disclose a polypeptide with 707 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Falduto et al. anticipate claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is not anticipated by Falduto et al. and requests withdrawal of this rejection under section 102(e).

Claims 1, 14-15, and 27, as drawn to SEQ ID NO:9, was rejected under 35 U.S.C. § 102(e) for anticipation by Dack et al. (2003/0199440 A1). As stated by the Examiner, Dack et al. disclose a polypeptide with 469 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Dack et al. anticipate claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is not anticipated by Dack et al. and requests withdrawal of this rejection under section 102(e).

Claims 1, 14-15, and 27, as drawn to SEQ ID NO:10, was rejected under 35 U.S.C. § 102(e) for anticipation by Dack et al. (2003/0199440 A1). As stated by the Examiner, Dack et al. disclose a polypeptide with 467 residues. While the claims of the present application are directed to peptide SEQ ID NO:8-10, which have only about 47-55 residues, the Examiner alleges that Dack et al. anticipate claim 1 because “comprising” is used therein. Claim 1 is now directed to an isolated peptide consisting of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit matrix metalloproteinase-2. Applicant submits that the subject matter of claim 1 is not anticipated by Dack et al. and requests withdrawal of this rejection under section 102(e).

§103 Rejection of the Claims

Claims 14-15 and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Falduto et al. (US 6,399,371 B1) in view of either Dack et al (2003/0199440 A1) or Hu (Statutory Invention Registration US H1973 H). According to the Examiner, Falduto et al. disclose a polypeptide with 707 residues that includes the presently claimed SEQ ID NO:8 peptide (with about 47 amino acids) but does not teach use of such a polypeptide to treat wounds. However, the Examiner asserts that Dack et al. (disclosing polypeptides with 467-469 residues) and Hu et al. (disclosing polypeptides with 444 and 491 residues) teach presently claimed SEQ ID NO:9 and 10 peptides (with about 54-55 amino acids) in compositions for treatment of wounds.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, the reference(s) must teach or suggest all the claim limitations. Finally, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed modification and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143. If the cited documents do not teach or suggest all the claim limitations, the rejection is improper.

Claim 14 is directed to a composition that comprises a therapeutically effective amount of peptide that consists of SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, and a

pharmaceutically acceptable carrier. Claim 27 is directed to a wound dressing that consists of a peptide comprising SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10, wherein the peptide can inhibit a matrix metalloproteinase.

Applicant submits that the combination of references cited by the Examiner does not teach all the claim elements, that there is no motivation to modify the reference teachings to obtain the present invention and that one of skill in the art would have no reasonable expectation that any such modification would be successful from the teachings of the references.

Applicant submits disclosure of 444-707 amino acid polypeptides by Falduto et al., Dack et al. and/or Hu is not a disclosure of present SEQ ID NO:8-10, which have only about 47-55 amino acids. Hence, the combination of references does not teach all elements of claims 14-15 and 27.

The Falduto et al., Dack et al. and Hu documents are limited to use of 444-707 amino acid polypeptides and provide no motivation to modify those polypeptides to obtain the present invention. As is recognized by one of skill in the art a single amino acid change can alter the biological properties of a polypeptide or peptide. Hence, without guidance in the cited references that the skilled artisan should use a shorter peptide sequence, teachings on the longer 444-707 amino acid polypeptides of Falduto et al., Dack et al. and Hu are irrelevant. One of skill in the art would not have a reasonable expectation of successfully changing the polypeptides taught Falduto et al., Dack et al. and Hu to obtain shorter peptides that would still be active.

Hence, Applicant submits that the present claims are non-obvious in view of Falduto et al., Dack et al. and Hu and respectfully requests withdrawal of this rejection of claims 14-15 and 27 under 35 U.S.C. § 103(a).

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (516) 795-6820 to facilitate prosecution of this application.

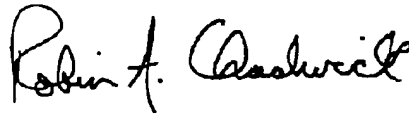
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date September 7, 2005

By _____
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 7th day of September, 2005.

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